

**APPENDIX A: ACRONYMS AND ABBREVIATIONS**

**A**

ABD	Architecture Block Diagram
A/C	Aircraft
AC	Alternating Current
ADS-B	Automatic Dependent Surveillance – Broadcast
AMP	Analysis Management Plan
AMS	Acquisition Management System
ANSI	American National Standards Institute
ARP	Aerospace Recommended Practice
ASDE-3	Airport Surface Detection Equipment – Model 3
ASDE-X	Airport Surface Detection Equipment – Model X
ASR	Airport Surveillance Radar
ASQ	American Society of Quality
AT	Air Traffic (organization within FAA)
ATCT	Air Traffic Control Tower
ATM	Air Traffic Management
ATO	Air Traffic Organization
ATO-P	Air Traffic Organization – Operations Planning
Avg	Average

**B**

BP	Base Practice
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**C**

C&A	Certification and Accreditation
CA	Certifying Agent
CAI	Contractor Acceptance Inspection
CAS	Cost Accounting Standard
CCB	Configuration Control Board
CCD	Configuration Change Decision
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CDTI	Cockpit Display of Traffic Information
CFE	Contractor-Furnished Equipment
CFR	Code of Federal Regulations
CHI	Computer-Human Interface
CI	Configuration Item
CM	Configuration Management
CMP	Configuration Management Plan
CNS	Communications, Navigation, Surveillance
Comm	Communications
CONOPS	Concept of Operations
CONUSE	Concept of Use
COTS	Commercial-Off-The-Shelf
CPI	Cost Performance Index

CPU	Central Processing Unit
CRD	Concept and Requirements Definition
CSA	Configuration Status Accounting
CSAR	Configuration Status Accounting Report
CSC	Computer Software Component
CSCI	Computer Software Configuration Item
CSE	Computer Software Elements
CTE	Critical Technology Element

**D**

DAA	Designated Approving Authority
DAG	Defense Acquisition Guidelines
DAR	Design Analysis Report
DAU	Defense Acquisition University
DC	Direct Current
Dept	Department
DID	Data Item Description
DM	Data Management
DO	Defense Order
DoD	Department of Defense
DoDAF	DoD Architecture Framework
DOORS	Dynamic Object-Oriented Requirements System
DOT	Department of Transportation

**E**

E <sup>3</sup>	Electromagnetic Environmental Effects
EA	Enterprise Architecture
ECP	Engineering Change Proposal
EIA	Electronics Industries Alliance
EM	Electromagnetic
EMC	Electromagnetic Compatibility
EME	Electromagnetic Environment
EMI	Electromagnetic Interference
EMP	Electromagnetic Pulse
EMS	Electromagnetic Susceptibility
Eng	Engineering
EPA	Environmental Protection Agency
ESD	Electrostatic Discharge
ESS	Environmental Stress Screening
Est	Estimate
EVM	Earned Value Management
EXT	External

**F**

5M	Mission, Man, Machine, Management, Media
FA	Functional Analysis
FAA	Federal Aviation Administration
FAD	Functional Analysis Document

FAST	Federal Aviation Administration Acquisition System Toolset
FBR	Functional Baseline Review
FCA	Functional Configuration Audit
FCC	Federal Communications Commission
FFBD	Functional Flow Block Diagram
FIPS	Federal Information Processing Standard
FISMA	Federal Information Security Act
FMEA	Failure Mode and Effects Analysis
FMECA	Failure Mode and Effects Criticality Analysis
FMO	Frequency Management Officer
fPR	final Program Requirements
FRACAS	Failure Reporting Analysis and Corrective Action System
FRAT	Field Reliability Acceptance Tests
fPR	Final Program Requirements (Document)
FTA	Fault Tree Analysis

## **G**

GA	General Aviation
GAO	General Accountability Office
GFE	Government-Furnished Equipment
GFP	Government Furnished Property
GIPEP	Government-Industry Data Exchange Program
Govt	Government
GPS	Global Positioning System
GSA	General Services Administration

## **H**

H/W	Hardware
HCI	Human-Computer Interface
HDR	Hardware Discrepancy Report
HERF	Hazard of EM Radiation to Fuels
HERP	Hazard of EM Radiation to Personnel
HF	Human Factors
HFE	Human Factors Engineering
HFWG	Human Factors Working Group
HHA	Hazard Health Assessment
HMM/EE	Hazardous Material Management/Environmental Engineering
HPI	Human Performance Interface
HSPD	Homeland Security Presidential Directive
HTRR	Hazard Tracking Resolution
HVAC	Heating, Ventilating, and Air-Conditioning
HWCI	Hardware Configuration Item

## **I**

IA	Integrity of Analyses
IARD	Investment Analysis Readiness Decision
IARR	Investment Analysis Readiness Review
ISAP	Implementation Strategy and Planning

IAT	Investment Analysis Team
IBR	Integrated Baseline Review
ICAO	International Civil Aviation Organization
ICD	Interface Control Document
iCMM	integrated Capability Maturity Model
ICR	Interface Change Request
ID	Identification
IDEF	Integrated Definition for Function Modeling
IEEE	Institute of Electrical and Electronics Engineers, Inc.
IEC	International Electrical Commission
I/F	Interface
IFR	Instrument Flight Rules
ILS	Integrated Logistical Support
ILSP	Integrated Logistical Support Plan
ILSPG	Integrated Logistics Support Process Guide
IM	Interface Management
IMS	Integrated Master Schedule
INCOSE	International Council on Systems Engineering
Intl	International
I/O	Input and Output
IOC	Initial Operational Capability
IOT&E	Independent Operational Test & Evaluation
iPR	Initial Program Requirements
IPT	Integrated Product Team
iRD	initial Requirements Document
IRD	Interface Requirements Document
ISAP	Implementation Strategy and Planning
ISD	In Service Decision
ISE	Information Security Engineering
ISO	International Organization for Standardization
ISPR	In Service Performance Review
ISR	In Service Review
ISP	Integrated Safety Plan
ISPR	In-Service Performance Review
ISS	Information Systems Security
ISSM	Information System Security Manager
ISSP	Information Systems Security Plan
IT	Information Technology
ITP	Integrated Technical Planning
ITS	Intelligent Transportation System
IWG	Interface Working Group

## **J**

JRC	Joint Resources Council
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## **K**

KPP	Key Performance Parameter
KSA	Knowledge, Skills, and Abilities
KSLOC	Thousands Source Lines of Code

**L**

LCE	Lifecycle Engineering
LCP	Lifecycle Plan
LOM	Level of Maturity
LRU	Lowest Replaceable Unit

**M**

MA	Mission Analysis
MASPS	Minimum Aviation System Performance Standards
MCI	Master Configuration Index
MCO	Designation for Orlando International Airport
Mhr	Man-Hour
MIL-HDBK	Military Handbook
MIL-STD	Military Standard
MNS	Mission Need Statement
MOE	Measure of Effectiveness
MOPS	Minimum Operational Performance Standards
MOU	Memorandum of Understanding
MRS	Mature Requirements Statement
MSE	Maintain System Engineering (process)
MTBF	Mean Time Between Failure
MTTF	Mean Time to (Initial) Failure
MTTR	Mean Time To Restore
MVP	Master Verification Plan

**N**

N/A	Not Applicable
N <sup>2</sup>	N-squared (used to denote an N by N open field matrix)
NAISL	National Airspace Integrated Logistics Support
NAS	National Airspace System
NASA	National Aeronautics and Space Administration
NASEA	NAS Enterprise Architecture
NATCA	National Association of Air Traffic Controllers
NCP	NAS Change Proposal
NDI	Non-developmental Item
NEC	National Electronic Code
NEXCOM	Next Generation Air/Ground Communications
NFPA	National Fire Protection Association
NIST	National Institute of Standards and Technology
NOTAM	Notice to Airmen
NSA	National Security Administration
NTIA	National Telecommunications and Information Administration

**O**

O&SHA	Operating and Support Hazard Analysis
OEA	Operational Environmental Assessment

OMB	Office of Management and Budget
ORD	Operational Requirements Document
OSA	Operational Safety Assessment
OSED	Operational Services and Environmental Description
OSHA	Occupational Safety and Health Administration
OT	Operational Tests
OT&E	Operational Test and Evaluation
OV	Operational View

**P**

P-Static	Precipitation Static
PA	Process Area
PBM	Process-Based Management
PCA	Physical Configuration Audit
PDR	Preliminary Design Review
PHA	Preliminary Hazard Analysis
PID	Probability Impact Diagram
Pkg	Package
PMBOK®	Project Management Body of Knowledge
PMI	Project Management Institute
PMR	Program Monthly Review
PPM	Program Performance Measurement
PPP	Program Performance Parameter
pPR	preliminary Program Requirements
PRS	Primitive Requirements Statement
PSL	Program Support Library
PT	Product Team
PTR	Program Trouble Report
PUB	Publication
PUI	Program-Unique Identifier

**Q**

QA	Quality Assurance
QE	Quality Engineering
QFD	Quality Function Deployment
QRO	Quality/Reliability Officer
Qtr	Quarter

**R**

RAA	Responsibility, Authority, and Accountability
RADHAZ	Hazards of Electromagnetic Radiation
RAM	Requirements Allocation Matrix
RCM	Reliability-Centered Maintenance
RCN	Requirements Change Notice
Ref	Reference
RF	Radio Frequency
RFA	Request for Action
RFD	Request for Deviation

RFI	Radio Frequency Interference
RFP	Request for Proposal
RFW	Request for Waiver
RM	Requirements Management
RMA	Reliability, Maintainability, Availability
RMP	Risk Management Plan
ROI	Return on Investment
RPG	Radar Product Generator
RSK	Risk Management
RTCA	RTCA, Inc.
RVCD	Requirements Verification Compliance Document

## **S**

SAE	Society of Automotive Engineers
SARP	Standards and Recommended Practices
SAT	Site Acceptance Testing
SBD	Schematic Block Diagram
SCAP	Security Certification and Authorization Package
SCN	Specification Change Notice
SE	System Engineering
SEBOK	System Engineering Body of Knowledge
SEC	System Engineering Council
SEM	System Engineering Manual
SEMP	System Engineering Management Plan
SFRA	System Functional Requirements Analysis
SHA	System Hazard Analysis
SHELL	Software, Hardware, Environment, Liveware
SIAR	SE Investment Analysis Review
SIR	Screening Information Request
SLC	System Life Cycle
SLMN	Service Level Mission Need
SMS	Safety Management System
SOO	Statement of Objectives
SOP	Standard Operating Procedure
SOS	System of Systems
SOW	Statement of Work
SP	Special Publication
SQA	Software Quality Assurance
SQAP	Software Quality Assurance Plan
SpecEng	Specialty Engineering
SPI	Schedule Performance Index
SRR	System Requirements Review
SRVT	Safety Requirements Verification Table
SSAR	System Safety Assessment Report
SSE	System Safety Engineering
SSH	System Safety Handbook
SSHA	Subsystem Hazard Analysis
SSMP	System Safety Management Plan
SSPP	System Safety Program Plan
STD	Standard

SV	System View
SYN	Synthesis

**T**

T&E	Test and Evaluation
TAAF	Test, Analyze, and Fix
TBD	To Be Determined
TIA	Telecommunications Industries Association
TPM	Technical Performance Measurement (or Measure)
TPP	Technical Performance Parameter
TRA	Technology Readiness Assessment
TS	Trade Studies
TSO	Technical Standing Order

**U**

UML	Unified Modeling Language
URL	Uniform Resource Locator
US	United States

**V**

VFR	Visual Flight Rules
VOR	Very High Frequency Omni directional Range
VR	Validation of Records
VRR	Verification Readiness Review
VRTM	Verification Requirements Traceability Matrix
V&V	Validation and Verification

**W**

WAAS	Wide Area Augmentation System
WARP	Weather and Radar Processor
WBS	Work Breakdown Structure
WSP	Weather System Processor
Wx	Weather